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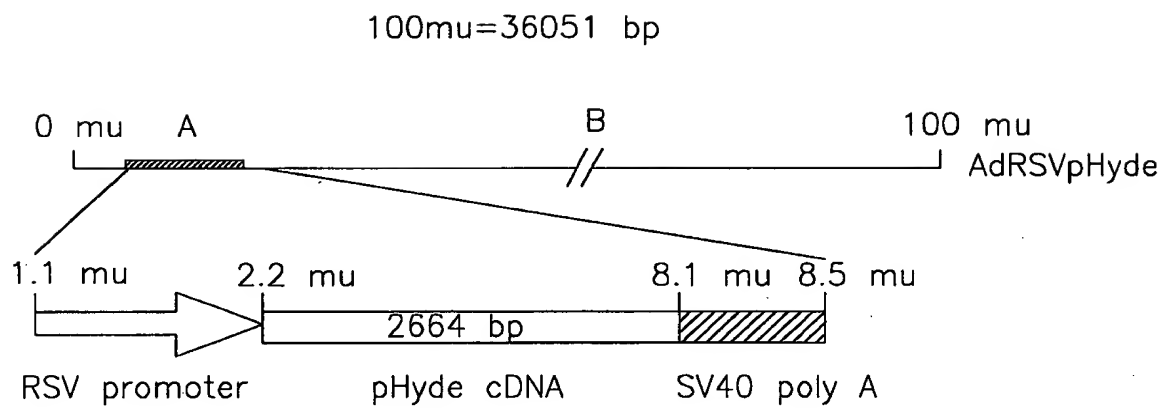


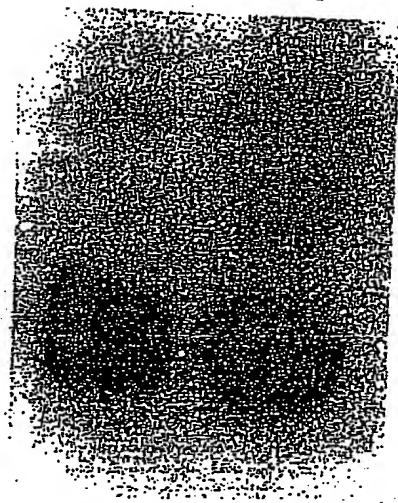
FIG.1

RECEIVED
JUL 28 2003
OIA/DOJ



DU145 Control

DU145/AdpHyde



← pHyde

← GAPDH

FIG. 2A

RECEIVED
JUL 28 2003
U.S. PATENT & TRADEMARK OFFICE



DU145 Control

DU145/AdRSVpHyde



← pHyde

FIG. 2B

DU145 (pHyde)

DU145 (pHyde)

DU145 (pHyde)

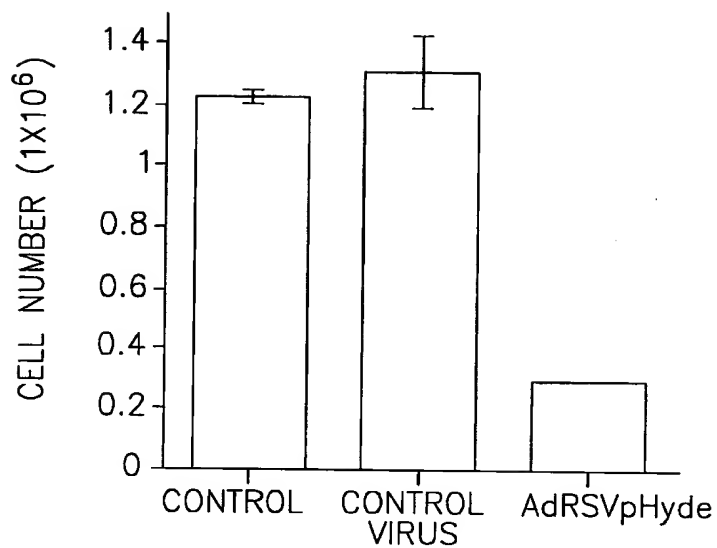


FIG.3A

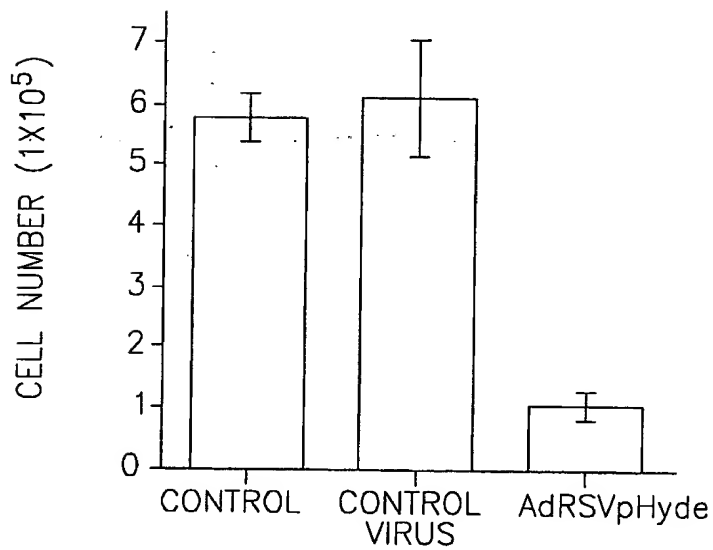


FIG.3B

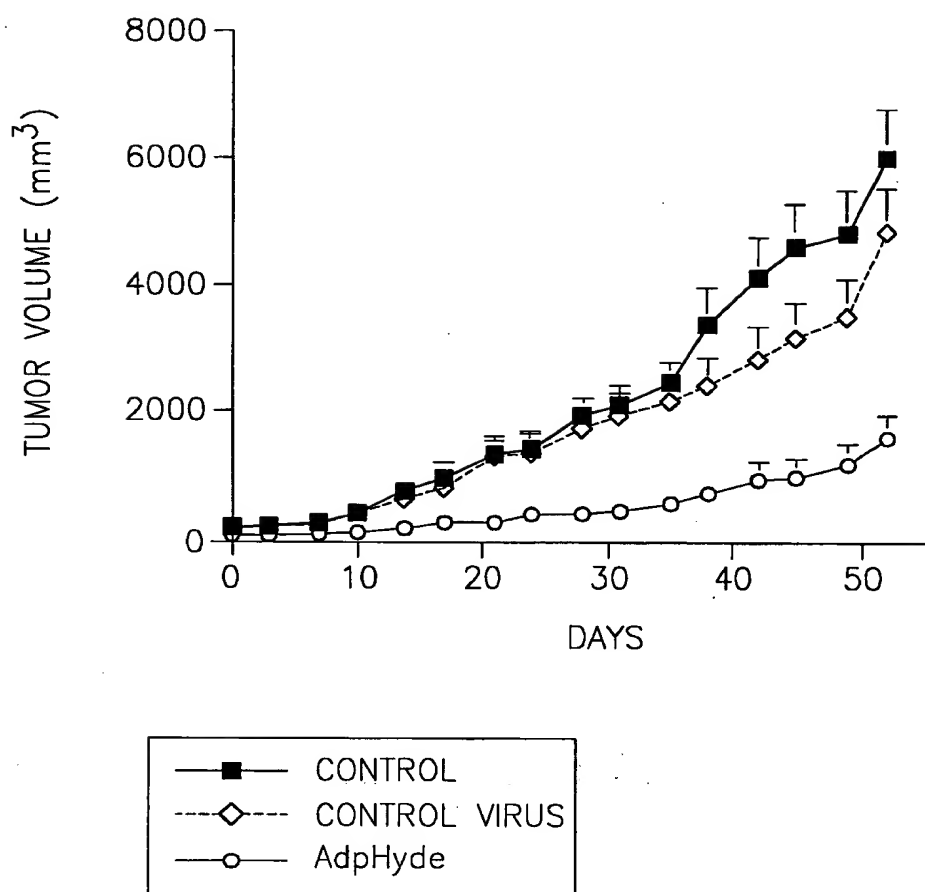
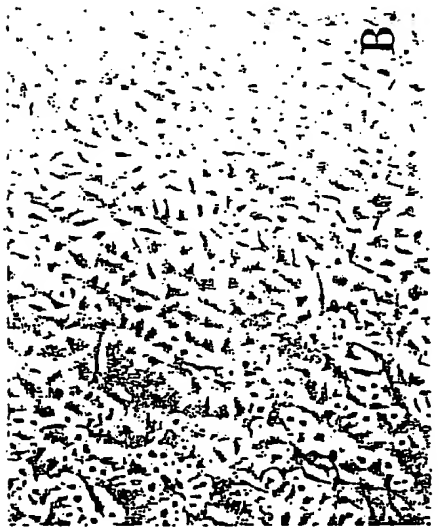


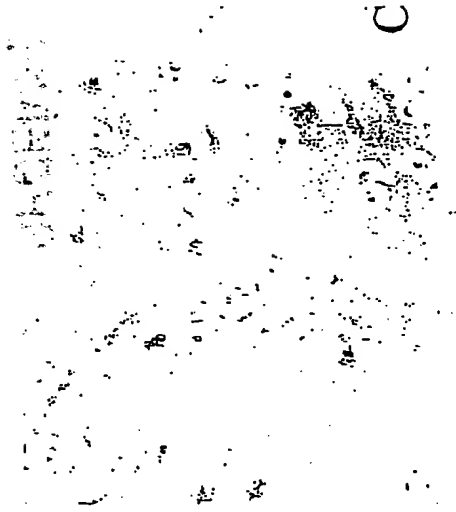
FIG.4



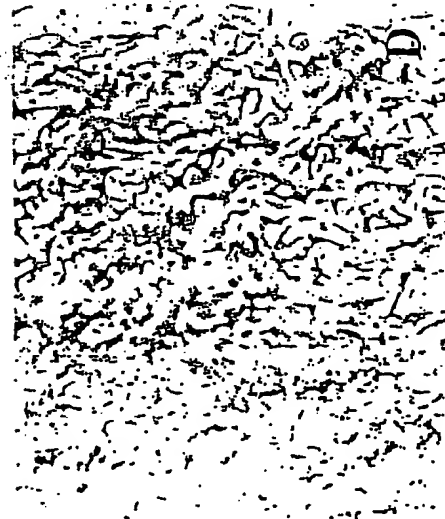
DU145 Control



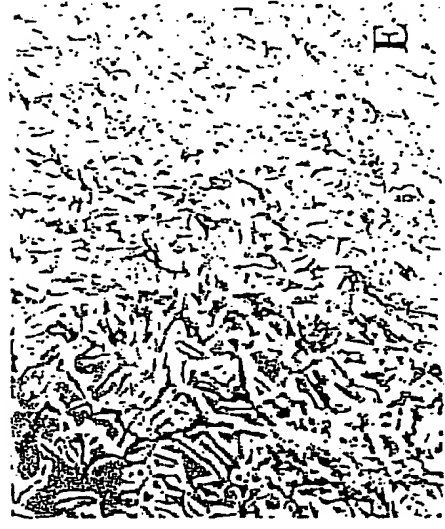
DU145/Control Virus



DU145/AdRSVpHyde



LNCaP Control



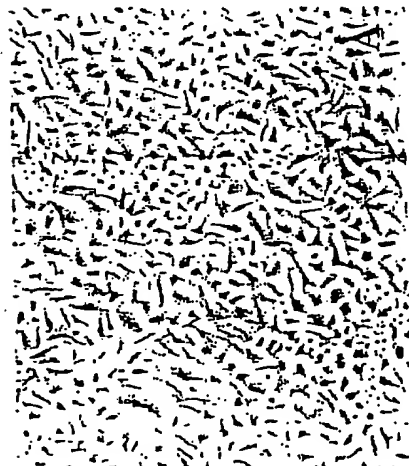
LNCaP/Control Virus



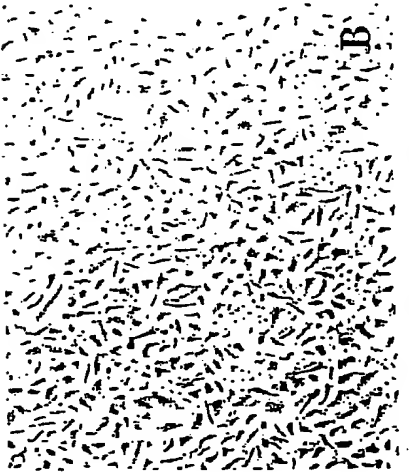
LNCaP/AdRSVpHyde

FIG. 5

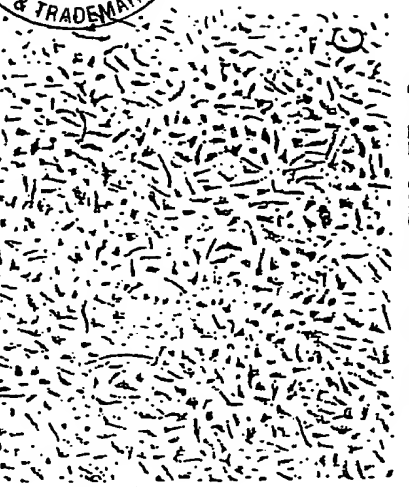




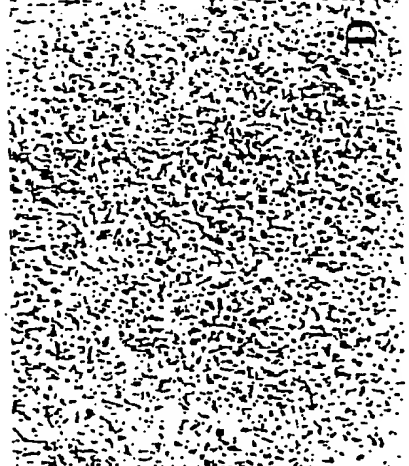
PC-3/Control



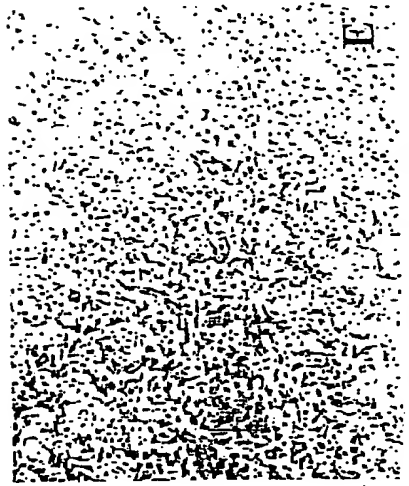
PC-3/Control Virus



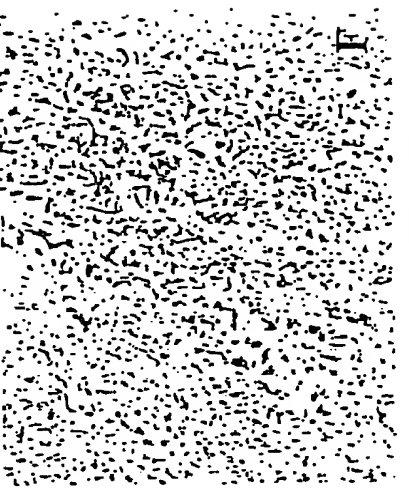
PC-3/AdRSVpHyde



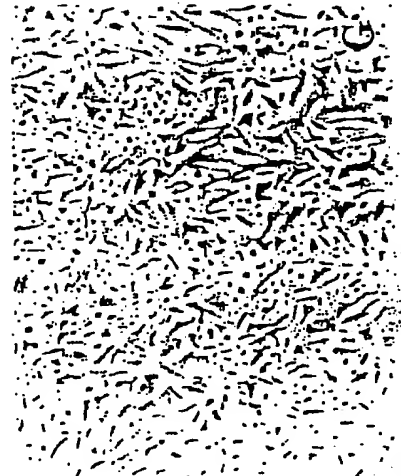
TSU/Control



TSU/Control Virus



TSU/AdRSVpHyde



PPC-1/Control



PPC-1/Control Virus



PPC-1/AdRSVpHyde

FIG. 6

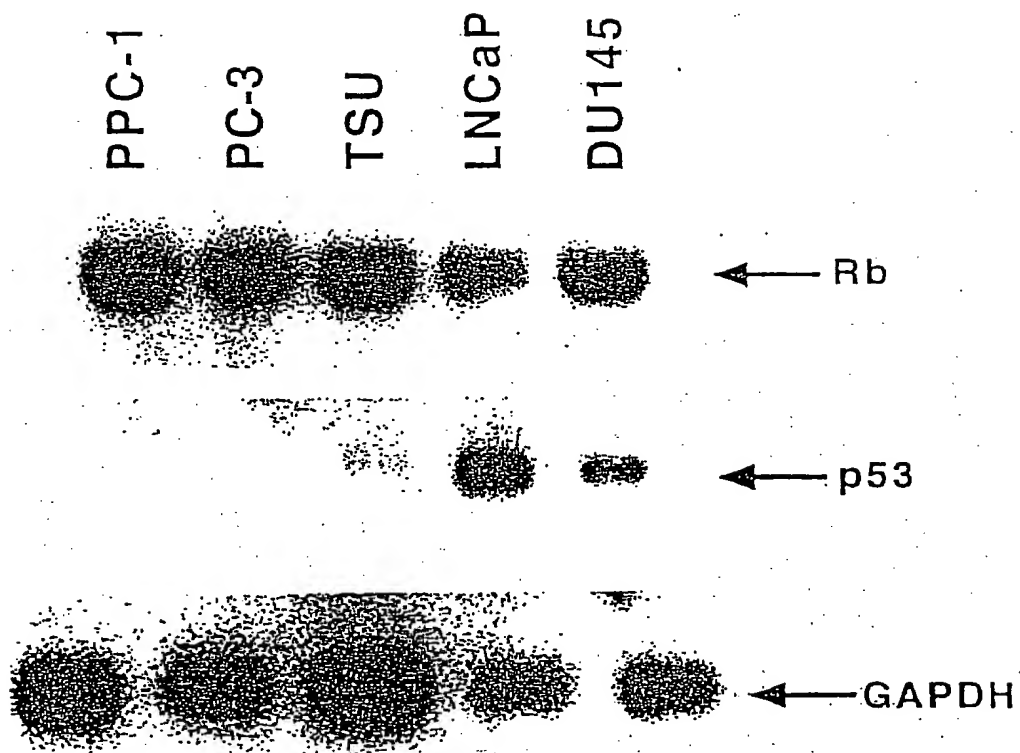


FIG. 7

10/10/03
10/10/03
10/10/03

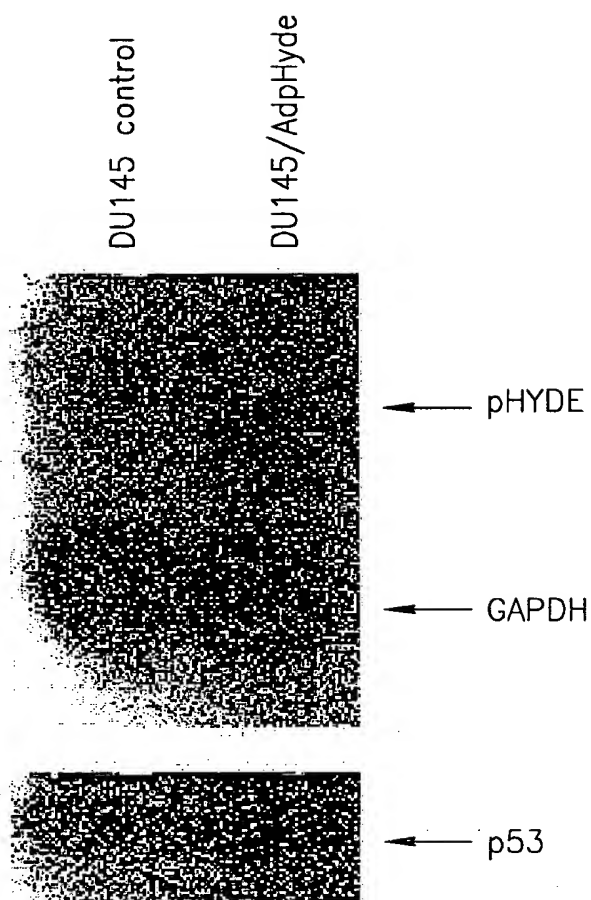


FIG.8

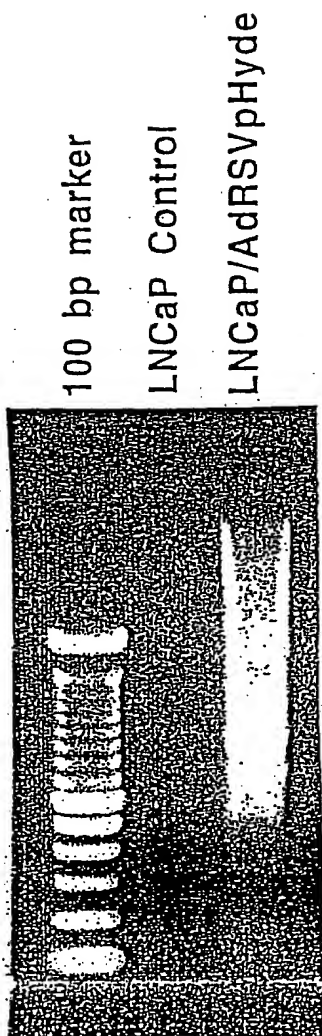


FIG. 9



SEQUENCE OF REGION A OF AdRSVpHyde:

GCGGCCGCCATCATCAATAATATACCTTATTTTGGATTGAAG
CCAATATGATAATGAGGGGGTGGAGTTTGTGACGTGGC
GCGGGGCGTGGGAACGGGGCGGGTGACGTAGTAGTGTGGC
GGAAGTGTGATGTTGCAAGTGTGGCGGAACACATGTAAGC
GACGGATGTGGCAAAAGTGACGTTTTTGGTGTGCGCCGGTG
TACACAGGAAGTGACAATTTTCGCGCGGTTTTAGGCGGA
TGTTGTAGTAAATTTGGGCGTAACCGAGTAAGATTTGGCCAT
TTTCGCGGGGAAACTGAATAAGAGGAAGTGAAATCTGA
ATAATTTTGTGTTACTCATAGCGCGTAATATTTGTCTAGGGCC
GCGGGGACTTTGACCGTTTACGTGGAGACTCGCCCAG
GGCGCGCCCCGATGTACGGGCCAGATATACGCGTATCTGAG
GGGACTAGGGTGTGTTTAGGGCGAAAAGCGGGGCTTCGGT
TGTACGCGGTTAGGAGTCCCCCTCAGGATATAGTAGTTTTCGCT
TTTGCATAGGGAGGGGGGAAATGTAGTCTTATGCAATAC
TCTTGTAGTCTTGCAACATGGTAACGATGAGTTAGCAACATG
CCTTACAAGGAGAGAAAAAGCACCGTGCGATGCCGATTG
GTGGAAGTAAGGTGGTACGATCGTGCTTATTAGGAAGGCTA
ACAGACGGGTCTGACATGGATTGGACGAACCACTGAATT
CCGCATTGCAGAGATATTGTATTTAAGTGCCTAGCTCGATAC
AATAAACGCCATTTGACCATTACCCACATTGGTGTGCA
CCTCCGGCCCTGGCCACTCTCTTCCGCATCGCTGTCTGCGGG
GGCCAGCTGTTGGGCTCGCGGTTGAGGACAACTCTTC
GCGGTCTTTCCAGTACTCTTGGATCGGAAACCCGTCGGCCCTC
CGAACGGTACTCCGCCGCCGAGGGACCTGAGCGAGTCC
GCATCGACCGGATCGGAAAACCTCTCGAGAAAGGCGTGTA
CCAGTCACAGTCGCTCTAGAACTAGTGGATCCCCCGGGC
TGCAGGAATTCGATAATTCGGCACGAGGCTGCCGAGGCACT
GTGATGTCCGGGGAGATGGACAAACCGCTCATCAGTCGC
CGCTTGGTGGACAGTGATGGCAGTCTGGCTGAGGTCCCCAA
GGAGGCTCCCAAAGTGGGCATCCTGGGCAGCGGGGATTT
TGCCCGGTCCCTGGCCACACGCCTGGTGGGCTCTGGCTTCT
TTGTGGTGGTGGGAAGCCGTAACCCCAAACGCACTGCCG
GCCTCTTCCCCTCCTTAGCCCAAGTGACTTTCCAGGAGGAGG
CCGTGAGCTCTCCAGAGGTCATCTTTGTGGCCGTGTTC
CGGGAGCACTACTCCTCACTGTGCAGTCTTGCTGACCAGTTG
GCTGGCAAGATCCTAGTGGATGTAAGCAACCCACGGA
GAAGGAGCGTCTTCAGCACCGCCAGTCGAACGCCGAGTACC
TGGCCTCCCTCTTCCCTGCCTGCACTGTGGTCAAGGCCT
TCAACGTCATCTCTGCATGGGCCCTACAGGCTGGCCCAAGG
GATGGGAACAGGCAGGTGCTCATCTGCGGTGACCAGCTG
GAAGCCAAGCACACCGTCTCAGAGATGGCGCGCGCCATGG
GTTTCACCCCACTGGACATGGGATCCCTGGCCTCAGCGAG
GGAGGTAGAGGCCATACCCCTGCGCCTCCTTCCATCCTGGA
AGGTGCCACCCCTCCTGGCCCTGGGGCTAAGCACACAAA

FIG.10A



GCTATGCCTACAACCTTCATCCGGGACGTTCTACAGCCGTACA
TCCGGAAAGATGAGAACAAGTTCTACAAGATGCCCTG
TCTGTGGTCAACACCACGaTACCCTGTGTGGCTTACGTGCTG
CTGTCCCTGGTTTACCTGCCTGGTGTGCTGGCAGCTGC
CCTTCAGCTGAGGAGGGGGACCAAGTACCAGCGCTTCCCAG
ACTGGCTGGACCATTGGCTGCAGCACCGCAAGCAGATCG
GGCTACTCAGCTTTTTTTTTCGCCATGCTGCACGCTCTCTACAG
CTTCTGCCTGCCGCTGCGCCGCTCCCACCGCTATGAT
CTGGTCAACCTGGCTGTGAAGCAGGTCTGGCCAACAAGAG
CCGCCTCTGGGTTGAGGAAGAAGTCTGGCGGATGGAGAT
ATACCTGTCCCTGGGTGTGCTGGCTCTGGGCATGCTGTCCT
GCTGGCGGTTACCTCGATCCCTTCCATTGCAAACCTCAC
TCAACTGGAAGGAGTTCAGCTTTGTGCAGTCCACGCTGGGC
TTCGTGGCCCTGATGCTGAGCACAATGCACACCCTCACC
TACGCGCTGGACCCGTGCTTTTGAGGAAAACCACTACAAGTTC
TACCTGCCACCCACATTCACGCTCACGCTGCTCCTGCC
CTGTGTCATCATCCTGGCCAAGGGCCTCTTCCTCCTGCCCTG
CCTCAGCCACAGACTCACCAAGATCCGCAGGGGGCTGGG
AGAGGGATGGTGCCGTCAAGTTCATGCTGCCCGCTGGCCAC
ACACAGGGGGGAGAAAACAAGCCACGTGTGAGGCCCTGGA
AATGGAGACAGGCAGAGCTTGTGGGGGGCCCTGGGCTGGGT
TCGGGTCTCTTTTCTGGGATGGTATATGCGTGGGTGGCCG
AGGTCTGAATTTCTGGGATGCAGGTGTATGCCGAGATACTCA
GAATGGCGTACCACACATGCGATAAGAGCTCACATATA
TTTCATATATAATAGGATTTTCTATTATTCTTAGTTAAAAAAA
ATAGTGGGTCTTATATTTCAACTTATGCAGGGTCC
CTATATTTCAACTTGAGCATTTCAGAGCAAATGCCACACATTA
AACAGCAGATCCCACCTTGTGGTAGCTGCAGAGACA
GACAGAACTTCTGGTtATGAGAGAGACTGTATTTTGTGGAT
TCTACCTTTAATCCCCGTTCTCTACGTTcCCCTGTTA
GCCACATCTTAACGTTGGTGCAGAGCTGGGACAAGAGCTGG
CTCTGGTGCAGCCTCCCCCATCCCAGGGCTAGGAAACAA
GCCTCTGATGAACAGAGGGACCAGGTCTGGACCCTCCTGCT
CCCGCTTCCCTGGGCTCGAGTGGGGAGGCTCAGCGGGAT
CCCCCGCAATCTGTGCAGGAGTTTTTCACAGGTCTGTCCTTTC
TTCCGGGAGCGGTCTGAAGCGGCCCCATCTGATCCTAG
CTGAGCCGAGATTGTTCCCCACTCCCTGAAAGTCCAGAGTCA
CCGTGGAGCCTGCAAATTGCTCCTTCTGCGAAGGTGTG
AAGTCACCGTCTCACCAGAGCCATTAACGAACCTGATCTTCA
GAAGAAGCATAATTGTTTCCCTCCATTAAGTTGGTGG
TGACCCTCTTTAAACCACTGTGCCTTCTCGCCTTTCCCATCAC
TAATTTGGGCATCTCCATGGAGTGGACTCTTGTGCGG
GCAGTTCAGGGGGGAGGGAAGCATTAGAGATTGCGGAGAA
TAACCATCGAAGCCTCCCTTGGATGTTCCCAGGCGTGCCT

FIG.10B



TCATTAAATTGGTCCCTAATGAGAATGACAGGGGACCCCTGT
TGCCTGTaTGCAGAGAACCAGCCTTCTGAGCACCCAGG
AAACACAGTGGCCCCACGCCCTTCAGGGGGGTCCCACGTCC
CCTTTCCCATGCTTTTGCCTCCCTCCCTCCCGGTTACAA
TCAACCATAAAAGTCTGCAAATATTGTTTTTTGAATTATCAAG
CTTATCGATACCGTCGAAACTTGTTTATTGCAGCTTA
TAATGGTTACAAATAAAGCAATAGCATCACAAATTTACAAAT
AAAGCATTTTTTTTCACTGCATTCTAGTTGTGGTTTGT
CCAAACTCATCAATGTATCTTATCATGTCTGGATCCGACCTCG
G

SEQUENCE OF REGION B OF AdRSVpHyde:

ATCTGGAAGGTGCTGAGGTACGATGAGACCCGCACCAGGTG
CAGACCCTGCGAGTGTGGCGGTAAACATATTAGGAACCA
GCCTGTGATGCTGGATGTGACCGAGGAGCTGAGGCCCGATC
ACTTGGTGCTGGCCTGCACCCGCGCTGAGTTTGGCTCTA
GCGATGAAGATACAGATTGAGGTACTGAAATGTGTGGGCGT
GGCTTAAGGGTGGGAAAGAATATATAAGGTGGGGGTCTT
ATGTAGTTTTGTATCTGTTTTGCAGCAGCCGCCGCCCATG
AGCACCAACTCGTTTGATGGAAGCATTGTGAGCTCATA
TTTGACAACGCGCATGCCCCCATGGGCCGGGGTGCGTGAGA
ATGTGATGGGCTCCAGCATTGATGGTCGCCCCGTCCTGC
CCGCAAACTCTACTACCTTGACCTACGAGACCGTGTCTGGAA
CGCCGTTGGAGACTGCAGCCTCCGCCGCCGCTTCAGCC
GCTGCAGCCACCGCCCCGCGGGATTGTGACTGACTTTGCTTTC
CTGACCCGCTTGCAAGCAGTGCAGCTTCCCGTTTCATC
CGCCCGCGATGACAAGTTGACGGCTCTTTTGGCACAATTGG
ATTCTTTGACCCGGGAACCTTAATGTCGTTTCTCAGCAGC
TGTTGGATCTGCGCCAGCAGGTTTCTGCCCTGAAGGCTTCCT
CCCCTCCAATGCGGTTTAAACATAAATAAAAAACCA
GACTCTGTTTGGATTTGGATCAAGCAAGTGTCTTGCTGTCTTT
ATTTAGTGGGTTTTGCGCGCGCGGTAGGCCCGGGACCA
GCGGTCTCGGTCGTTGAGGGTCCTGTGTATTTTTTCCAGGAC
GTGGTAAAGGTGACTCTGGATGTTTCAAGATACATGGGCA
TAAGCCCGTCTCTGGGGTGGAGGTAGCACCACTGCAGAGCT
TCATGCTGCGGGGTGGTGTGTAGATGATCCAGTCGTAG
CAGGAGCGCTGGGCGTGGTGCCTAAAAATGTCTTTCAGTAG
CAAGCTTATTGCCAGGGGCAGGCCCTTGGTGTAAAGTGTT
TACAAAGCGGTTAAGCTGGGATGGGGGCATACGTGGGGATA
TGAGATGCATCTTGGACTGTATTTTTTAGGTTGGCTATGT
TCCCAGCCATATCCCTCCGGGGATTTCATGTTGTGCAGAACCA
CCAGCACAGTGTATCCGGTGCCTTGGGAAATTTGTCA
TGTAGCTTAGAAGGAAATGCGTGGAAGAACTTGGAGACGCC
CTTGTGACCTCCAAGATTTTCCATGCATTGTCCTCATAAT
GATGGCAATGGGCCCACGGGCGGCGGCCTGGGCGAAGATA
TTTCTGGGATCACTAACGGCATAGTTGTGTTCCAGGATGA

FIG.10C



GATCGTCATAGGCCATTTTTACAAAGCGCGGGCGGAGGGTG
CCAGACTGCGGTATAATGGTTCCATCCGGCCCAGGGGCG
TAGTTACCCTCACAGATTTGCATTTCCACGCTTTGAGTTCAG
ATGGGGGGGATCATGTCTACCTGCGGGGCGATGAAGAA
AACGGTTTTCCGGGGTAGGGGAGATCAGCTGGGAAGAAAGC
AGGTTCTGAGCAGCTGCGACTTACCGCAGCCGGTGGGCC
GCTAAATCACACCTATTACCGGGTGCAACTGGTAGTTAAGAG
AGCTGCAGCTGCCGTCATCCCTGAGCAGGGGGGCGCACT
TCGTTAAGCATGTCCCTGACTCGCATGTTTTCCCTGACCAAAT
CCGCCAGAAGGCGCTCGCCGCCAGCGATAGCAGTTC
TTGCAAGGAAGCAAAGTTTTTCAACGGTTTGAGACCGTCCGC
CGTAGGCATGCTTTTGAGCGTTTGACCAAGCAGTTCCA
GGCGGTCCCACAGCTCGGTACCTGCTCTACGGCATCTCGA
TCCAGCATATCTCCTCGTTTTGCGGGTTGGGGCGGCTTT
CGCTGTACGGCAGTAGTCGGTGCTCGTCCAGACGGGCCAGG
GTCATGTCTTTCCACGGGCGCAGGGTCCTCGTCAGCGTA
GTCTGGGTCACGGTGAAGGGGTGCGCTCCGGGCTGCGCGC
TGGCCAGGGTGCGCTTGAGGCTGGTCCTGCTGGTGCTGAA
GCGCTGCCGGTCTTCGCCCTGCGCGTCGGCCAGGTAGCATT
TGACCATGGTGTCATAGTCCAGCCCCTCCGCGGCGTGGC
CCTTGCGCGCAGCTTGCCCTTGAGAGGAGGCGCCGCACGA
GGGGCAGTGCAGACTTTTGAGGGCGTAGAGCTTGGGCGCG
AGAAATACCGATTCCGGGGAGTAGGCATCCGCGCCGACGGC
CCCGCAGACGGTCTCGCATTCCACGAGCCAGGTGAGCTC
TGGCCGTTCCGGGGTCAAAAACAGGTTTCCCCATGCTTTTT
GATGCGTTTCTTACCTCTGGTTTCCATGAGCCGGTGTC
CACGCTCGGTGACGAAAAGGCTGTCCGTGTCCCCGTATACA
GACTTGAGAGGCCTGTCTAGAGCGGTGTTCCGCGGTCC
TCCTCGTATAGAACTCGGACCACTCTGAGACAAAGGCTCGC
GTCCAGGCCAGCACGAAGGAGGCTAAGTGGGAGGGGTA
GCGGTGTTGTCCACTAGGGGGTCCACTCGCTCCAGGGTGT
GAAGACACATGTCGCCCTCTTCGGCATCAAGGAAGGTGA
TTGGTTTGTAGGTGTAGGCCACGTGACCGGGTGTTCTCTGAA
GGGGGGCTATAAAAGGGGGTGGGGGCGCGTTCTCTCTAC
CTCTCTTCCGCATCGCTGTCTGCGAGGGGCCAGCTGTTGGGG
TGAGTACTCCCTCTGAAAAGCGGGCATGACTTCTGCGCT
AAGATTGTGAGTTTCCAAAAACGAGGAGGATTTGATATTAC
CTGGCCCGCGTTGATGCCTTTGAGGGTGGCCGCATCCA
TCTGGTCAGAAAAGACAATCTTTTTGTTGTCAAGCTTGGTGG
CAAACGACCCGTAGAGGGCGTTGGACAGCAACTTGGCG
ATGGAGCGCAGGGTTTGGTTTTTGTGCGGATCGGCGCGCTC
CTTGCCGCGATGTTTAGCTGCACGTATTCGCGCGCAAC
GCACCGCCATTCCGGGAAAGACGGTGGTGGCTCGTCGGGC
ACCAGGTGCACGCGCCAACCGCGGTTGTGCAGGGTGACAA
GGTCAACGCTGGTGGCTACCTCTCGCGCTAGGCGCTCGTTG
GTCCAGCAGAGGCGGCCGCCCTTGCGCGAGCAGAATGGC

FIG.10D



GGTAGGGGGTCTAGCTGCGTCTCGTCCGGGGGGTCTGCGTC
CACGGTAAAGACCCCGGGCAGCAGGCGCGCTCGAAGTA
GTCTATCTTGCATCCTTGCAAGTCTAGCGCCTGCTGCCATGC
GCGGGCGGCAAGCGCGCGCTCGTATGGGTTGAGTGGGG
GACCCCATGGCATGGGGTGGGTGAGCGCGGAGGCGTACAT
GCCGCAAATGTCGTAAACGTAGAGGGGCTCTCTGAGTATT
CCAAGATATGTAGGGTAGCATCTTCCACCGCGGATGCTGGC
GCGCACGTAATCGTATAGTTCTGCGAGGGAGCGAGGAG
GTCGGGACCGAGGTTGCTACGGGCGGGCTGCTCTGCTCGG
AAGACTATCTGCCTGAAGATGGCATGTGAGTTAAATGATA
TGGTTGGACGCTGGAAGACGTTGAAGCTGGCGTCTGTGAGA
CCTACCGCGTCACGCACGAAGGAGGCGTAGGAGTCGCGC
AGCTTCTTGACCAGCTCGGCGGTGACCTGCACGTCTAGGGC
GCAGTAGTCCAGGGTTTCTTGATGATGTCATACTTATC
CTGTCCCTTTTTTTTCCACAGCTCGCGGTTGAGGACAACTCT
TCGCGGTCTTCCAGTACTCTTGATCGGAAACCCGT
CGGCCTCCGAACGGTAAGAGCCTAGCATGTAGAACTGGTTG
AGGGCCTGGTAGGCGCAGCATCCCTTTTCTACGGGTAGC
GCGTATGCCTGCGCGGCCTTCCGGAGCGAGGTGTGGGTGA
GCGCAAAGGTGTCCCTGACCATGACTTTGAGGTACTGGTA
TTTGAAGTCAGTGTGCTCGCATCCGCCCTGCTCCCAGAGCAA
AAAGTCCGTGCGCTTTTTTGAACGCGGATTTGGCAGGG
CGAAGGTGACATCGTTGAAGAGTATCTTTCCCGCGCGAGGC
ATAAAGTTGCGTGTGATGCGGAAGGGTCCCGGCACCTCG
GAACGGTTGTTAATTACCTGGGCGGCGAGCACGATCTCGTT
AAAGCCGTTGATGTTGTGGCCACAATGTAAAGTTCCAA
GAAGCGCGGGATGCCCTTGATGGAAGGCAATTTTTTAAGTTC
CTCGTAGGTGAGCTCTTCAGGGGAGCTGAGCCCGTGCT
CTGAAAGGGGCCAGTCTGCAAGATGAGGTGTGGAAGCGAC
GAATGAGCTCCACAGGTACGGGCCATTAGCATTTGCAGG
TGGTCGCGAAAGGTCCTAAACTGGCGACCTATGGCCATTTTT
TCTGGGGTGATGCAGTAGAAGGTAAGCGGGTCTTGTTT
CCAGCGGTCCCATCCAAGGTTGCGGGCTAGGTCTCGCGCGG
CAGTCACTAGAGGCTCATCTCCGCCGAACCTTCATGACCA
GCATGAAGGGCACGAGCTGCTTCCCAAAGGCCCCCATCCAA
GTATAGGTCTCTACATCGTAGGTGACAAAGAGACGCTCG
GTGCGAGGATGCGAGCCGATCGGGAAGAACTGGATCTCCC
GCCACCAATTGGAGGAGTGGCTATTGATGTGGTGAAAGTA
GAAGTCCCTGCGACGGGCCGAACACTCGTGCTGGCTTTTGT
AAAAACGTGCGCAGTACTGGCAGCGGTGCACGGGCTGTA
CATCCTGCACGAGGTTGACCTGACGACCGCGCACAAGGAAG
CAGAGTGGGAATTTGAGCCCCTCGCCTGGCGGGTTTGGC
TGGTGGTCTTCTACTTCCGGCTGCTTGACCTTGACCGTCTGGC
TGCTCGAGGGGAGTTACGGTGGATCGGACCACCACGCC
GCGCGAGCCCAAAGTCCAGATGTCCGCGCGCGGGCGGTCCG
AGCTTGATGACAACATCGCGCAGATGGGAGCTGTCCATGG

FIG.10E



TCTGGAGCTCCCGCGGGCGTCAGGTCAGGCGGGAGCTCCTGC
AGGTTTACCTCGCATAGACGGGTCAGGGCGCGGGCTAGA
TCCAGGTGATACCTAATTTCCAGGGGCTGGTTGGTGGCGGC
GTCGATGGCTTGCAAGAGGCCGCATCCCCGCGGCGCGAC
TACGGTACCGCGCGGGCGGGCGGTGGGCCGCGGGGGTGTCC
TTGGATGATGCATCTAAAAGCGGTGACGCGGGCGAGCCCC
CGGAGGTAGGGGGGGCTCCGGACCCGCCGGGAGAGGGGG
CAGGGGCACGTCGGCGCCGCGCGCGGGCAGGAGCTGGTGC
T
GCGCGCGTAGGTTGCTGGCGAACGCGACGACGCGGGCGGTT
GATCTCCTGAATCTGGCGCCTCTGCGTGAAGACGACGGGC
CCGGTGAGCTTGAGCCTGAAAGAGAGTTTCGACAGAATCAAT
TTCGGTGTGCTTGACGGCGGCCTGGCGCAAATCTCCTG
CACGTCTCCTGAGTTGTCTTGATAGGCGATCTCGGCCATGAA
CTGCTCGATCTCTTCCTCCTGGAGATCTCCGCGTCCGG
CTCGCTCCACGGTGGCGGGCAGGTCGTTGGAAATGCGGGC
CATGAGCTGCGAGAAGGCGTTGAGGCCTCCCTCGTTCCAG
ACGCGGCTGTAGACCACGCCCCCTTCGGCATCGCGGGCGCG
CATGACCACCTGCGCGAGATTGAGCTCCACGTGCCGGGC
GAAGACGGCGTAGTTTTCGAGGCGCTGAAAGAGGTAGTTGA
GGGTGGTTGGCGGTGTGTTCTGCCACGAAGAAGTACATAA
CCCAGCGTCGCAACGTGGATTCTGTTGATATCCCCCAAGGCCT
CAAGGCGCTCCATGGCCTCGAGGAAGTCCAAGGCGAAG
TTGAAAACTGGGAGTTGCGCGCCGACACGGTTAACTCCTC
CTCCAGAAGACGGATGAGCTCGGCGACAGTGTGCGGCAC
CTCGCGCTCAAAGGCTACAGGGGCCTCTTCTTCTTCTTCAAT
CTCCTCTTCCATAAGGGCCTCCCCTTCTTCTTCTTCTG
GCGGCGGTGGGGGAGGGGGGACACGGCGGGCAGCAGGC
GCACCGGGAGGCGGTGACAAAGCGCTTCGATCATCTCCCCG
CGGCGACGGCGCATGGTCTCGGTGACGGCGCGGCCGTTCT
CGCGGGGGCGCAGTTGGAAGACGCCGCCCGTCATGTCCCG
GTTATGGGTTGGCGGGGGGCTGCCATGCGGCAGGGATACG
GCGCTAACGATGCATCTCAACAATTGTTGTGTAGGTACTC
CGCCGCCGAGGGACCTGAGCGAGTCCGCATCGACCGGATC
GGAACCTCTCGAGAAAGGCGTCTAACCAGTCACAGTCG
CAAGGTAGGCTGAGCACCGTGGCGGGCGGCAGCGGGCGGC
GGTCGGGGTTGTTTCTGGCGGAGGTGCTGCTGATGATGTA
ATTAAAGTAGGCGGTCTTGAGACGGCGGATGGTCGACAGAA
GCACCATGTCCTTGGGTCCGGCCTGCTGAATGCGCAGGC
GGTCGGCCATGCCCCAGGCTTCGTTTTGACATCGGCGCAGG
TCTTTGTAGTAGTCTTGCATGAGCCTTTCTACCGGCACT
TCTTCTTCTCCTTCTTGTCTGTCATCTTTGCATCTATCGC
TGCGGCGGCGGCGGAGTTTGGCCGTAGGTGGCGCCC
TCTTCTTCCCATGCGTGTGACCCCGAAGCCCTCATCGGCTG
AAGCAGGGCTAGGCTGGCGACAACGCGCTCGGCTAATA
TGGCCTGCTGCACCTGCGTGAGGGTAGACTGGAAGTCATCC

FIG.10F



ATGTCCACAAAGCGGTGGTATGCGCCCGTGTTGATGGTG
TAAGTGCAGTTGGCCATAACGGACCAGTTAACGGTCTGGTG
ACCCGGCTGCGAGAGCTCGGTGTACCTGAGACGCGAGTA
AGCCCTCGAGTCAAATACGTAGTCGTTGCAAGTCCGCACCA
GGTACTGGTATCCCACCAAAAAGTGCGGCGGCGGGCTGGC
GGTAGAGGGGCCAGCGTAGGGTGGCCGGGGCTCCGGGGG
CGAGATCTTCCAACATAAGGCGATGATAATCCGTAGATGTAC
CTGGACATCCAGGTGATGCCCGGCGGGCGGTGGTGAGGGCGC
GCGGAAAGTCGCGGACGCGGTTCCAGATGTTGCGCAGCGG
CAAAAAGTGCTCCATGGTCGGGACGCTCTGGCCGGTCAGGC
GCGCGCAATCGTTGACGCTCTACCGTGCAAAAGGAGAGC
CTGTAAGCGGGCACTCTTCCGTGGTCTGGTGGATAAATTTCG
AAGGGTATCATGGCGGACGACCGGGGTTTCGAGCCCCGT
ATCCGGCCGTCCGCCGTGATCCATGCGGTTACCGCCCGCGT
GTCGAACCCAGGTGTGCGACGTCAGACAACGGGGGAGTG
CTCCTTTTGGCTTCTTCCAGGCGCGGCGGCTGCTGCGCTAG
CTTTTTTGGCCACTGGCCGCGCGCAGCGTAAGCGGTTA
GGCTGGAAAGCGAAAGCATTCCGTGGCTCGCTCCCTGTAGC
CGGAGGGTTATTTTCCAAGGGTTGAGTCGCGGGACCCCC
GGTTCGAGTCTCGGACCGGCCGGACTGCGGCGAACGGGGG
TTTGCCTCCCCGTCATGCAAGACCCCGCTTGCAAATTCCT
CCGGAAACAGGGACGAGCCCCCTTTTTTGGCTTTTCCCAGATGC
ATCCGGTGCTGCGGCAGATGCGCCCCCTCCTCAGCAG
CGGCAAGAGCAAGAGCAGCGGCAGACATGCAGGGCACCT
CCCCTCCTCCTACCGCGTCAGGAGGGGCGACATCCGCGGT
TGACGCGGCAGCAGATGGTGATTACGAACCCCCGCGGCGCC
GGGCCCCGGCACTACCTGGACTTGGAGGAGGGCGAGGGCC
TGGCGCGGCTAGGAGCGCCCTCTCCTGAGCGGTACCCAAGG
GTGCAGCTGAAGCGTGATACGCGTGAGGCGTACGTGCCG
AGGCAGAACCTGTTTCGCGACCGCGAGGGAGAGGAGCCCC
AGGAGATGCGGGATCGAAAGTTCCACGCAGGGCGCGAGCT
GCGGCATGGCCTGAATCGCGAGCGGTTGCTGCGCGAGGAT
GACTTTGAGCCCGACGCGCGAACCGGGATTAGTCCCGCGC
GCGCACACGTGGCGGCCGCGACCTGGTAACCGCATACGA
GCAGACGGTGAACCAGGAGATTAACCTTTCAAAAAAGCTTT
AACAAACACGTGCGTACGCTTGTGGCGCGCGAGGAGGTGG
CTATAGGACTGATGCATCTGTGGGACTTTGATTGCGCGCT
GGAGCAAAACCCAAATAGCAAGCCGCTCATGGCGCAGCTGT
TCCTTATAGTGACGACAGCAGGGACAACGAGGCATTCA
GGGATGCGCTGCTAAACATAGTAGAGCCCGAGGGCCGCTG
GCTGCTCGATTTGATAAACATCCTGCAGAGCATAGTGGTG
CAGGAGCGCAGCTTGAGCCTGGCTGACAAGGTGGCCGCCAT
CAACTATTCCATGCTTAGCCTGGGCAAGTTTTTACGCCC
CAAGATATACCATACCCCTTACGTTCCCATAGACAAGGAGGT
AAAGATCGAGGGGTTCTACATGCGCATGGCGCTGAAGG
TGCTTACCTTGAGCGACGACCTGGGCGTTTATCGCAACGAG

FIG.10G

FIG.10H

100



GATAGAGAGCCTAGTGGACAAGATGAGTAGATGGAAGAC
GTACGCGCAGGAGCACAGGGACGTGCCAGGCCCGCGCCCG
CCCACCCGTCGTCAAAGGCACGACCGTCAGCGGGGTCTGG
TGTGGGAGGACGATGACTCGGCAGACGACAGCAGCGTCCT
GGATTTGGGAGGGAGTGGCAACCCGTTTGCGCACCTTCGC
CCCAGGCTGGGGAGAATGTTTTAAAAAAAAAAAAAGCATGAT
GCAAAATAAAAACTCACCAAGGCCATGGCACCGAGCGT
TGGTTTTCTTGTATTCCCTTAGTATGCGGCGCGCGGCGATG
TATGAGGAAGGTCTCTCTCTCTACGAGAGTGTGGT
GAGCGCGGCGCCAGTGGCGGCGGCGCTGGGTTCTCCCTTC
GATGCTCCCCTGGACCCGCCGTTTGTGCCTCCGCGGTACC
TGCGGCCTACCGGGGGGAGAAACAGCATCCGTTACTCTGAG
TTGGCACCCCTATTGACACCAACCCGTGTGTACCTGGTG
GACAACAAGTCAACGGATGTGGCATCCCTGAACTACCAGAA
CGACCACAGCAACTTTCTGACCACGGTCATTCAAAACAA
TGACTACAGCCCGGGGGAGGCAAGCACACAGACCATCAATC
TTGACGACCGGTCGCACTGGGGCGGCGACCTGAAAACCA
TCCTGCATACCAACATGCCAAATGTGAACGAGTTCATGTTTA
CCAATAAGTTTAAGGCGCGGGTGATGGTGTGCGCCTTG
CCTACTAAGGACAATCAGGTGGAGCTGAAATACGAGTGGGT
GGAGTTCACGCTGCCCCGAGGGCAACTACTCCGAGACCAT
GACCATAGACCTTATGAACAACGCGATCGTGGAGCACTACTT
GAAAGTGGGCAGACAGAACGGGGTTCTGGAAAGCGACA
TCGGGGGTAAAGTTTGACACCCGCAACTTCAGACTGGGGTTT
GACCCCGTCACTGGTCTTGTGCATGCCTGGGGTATATACA
AACGAAGCCTTCCATCCAGACATCATTTTGCTGCCAGGATGC
GGGGTGGACTTCACCCACAGCCGCTGAGCAACTTGTT
GGGCATCCGCAAGCGGCAACCCTTCCAGGAGGGCTTTAGGA
TCACCTACGATGATCTGGAGGGTGGTAACATTCCCGCAC
TGTTGGATGTGGACGCCTACCAGGCGAGCTTGAAAGATGAC
ACCGAACAGGGCGGGGGTGGCGCAGGCGGCAGCAACAGC
AGTGGCAGCGGCGGGAAGAGAACTCCAACGCGGCAGCCG
CGGCAATGCAGCCGGTGGAGGACATGAACGATCATGCCAT
TCGCGGCGACACCTTTGCCACACGGGCTGAGGAGAAGCGC
GCTGAGGCCGAAGCAGCGGCCGAAGCTGCCGCCCCCGCTG
CGCAACCCGAGGTCGAGAAGCCTCAGAAGAAACCGGTGATC
AAACCCCTGACAGAGGACAGCAAGAAACGCAGTTACAAC
CTAATAAGCAATGACAGCACCTTCACCCAGTACCGCAGCTGG
TACCTTGATACAACCTACGGCGACCCTCAGACCGGAAT
CCGCTCATGGACCCTGCTTTGCACTCCTGACGTAACCTGCGG
CTCGGAGCAGGTCTACTGGTCTTGCCAGACATGATGC
AAGACCCCGTGACCTTCCGCTCCACGCGCCAGATCAGCAAC
TTTCCGGTGGTGGGCGCCGAGCTGTTGCCCGTGCACTCC
AAGAGCTTCTACAACGACCAAGGCCGTCTACTCCCAACTCATC
CGCCAGTTTACCTCTCTGACCCACGTGTTCAATCGCTT
TCCCGAGAACCAGATTTTGGCGCGCCCGCCAGCCCCCACCA

FIG.10I



CCGCCGCCGTGCGCGTCGCCAGCCCGTGCTGGCCCCGAT
TTCCGTGCGCAGGGTGGCTCGCGAAGGAGGCAGGACCCTG
GTGCTGCCAACAGCGCGCTACCACCCAGCATCGTTTAAA
AGCCGGTCTTTGTGGTTCTTGAGATATGGCCCTCACCTGCC
GCCTCCGTTTCCCGGTGCCGGGATTCCGAGGAAGAATG
CACCGTAGGAGGGGCATGGCCGGCCACGGCCTGACGGGCG
GCATGCGTCGTGCGCACCAACGGCGGGCGGCGCGCTCGCA
CCGTGCGATGCGCGGGCGGTATCCTGCCCTCCTTATTCCACT
GATCGCCGCGGGCGATTGGCGCCGTGCCCGGAATTGCAT
CCGTGGCCTTGAGGGCGCAGAGACACTGATTA AAAACAAGT
TGCATGTGGGAAAAATCAAAATAAAAAGTCTGGACTCTCA
CGCTCGCTTGGTCCTGTAAC TATTTTGTAGAATGGAAGACAT
CAACTTTGCGTCTCTGGCCCCGCGACACGGCTCGCGCC
CGTTCATGGGAAACTGGCAAGATATCGGCACCAGCAATATG
AGCGGTGGCGCCTTCAGCTGGGGCTCGCTGTGGAGCGGC
ATTA AAAAATTTCCGGTTCCACCGTTAAGAACTATGGCAGCAAG
GCCTGGAACAGCAGCACAGGCCAGATGCTGAGGGATAA
GTTGAAAGAGCAAAATTTCCAACAAAAGGTGGTAGATGGCC
TGGCCTCTGGCATTAGCGGGGTGGTGGACCTGGCCAACC
AGGCAGTGCAAAATAAGATTAACAGTAAGCTTGATCCCCGCC
CTCCCGTAGAGGAGCCTCCACCGGCCGTGGAGACAGTG
TCTCCAGCGGGGCGTGGCGAAAAGCGTCCGCGCCCCGACA
GGGAAGAAACTCTGGTGACGCAAATAGACGAGCCTCCCTC
GTACGAGGAGGCACTAAAGCAAGGCCTGCCACCAACCCGTC
CCATCGCGCCCATGGCTACCGGAGTGCTGGGCCAGCACA
CACCCGTAACGCTGGACCTGCCTCCCCCGCCGACACCCAG
CAGAAACCTGTGCTGCCAGGCCCGACCGCCGTTGTTGTA
ACCCGTCCTAGCCGCGCGTCCCTGCGCCGCGCCGCCAGCGG
TCCGCGATCGTTGCGGGCCCGTAGCCAGTGGCAACTGGCA
AAGCACACTGAACAGCATCGTGGGTCTGGGGGTGCAATCCC
TGAAGCGCCGACGATGCTTCTGAATAGCTAACGTGTCTG
ATGTGTGTGTCATGTATGCGTCCATGTCGCCGCCAGAGGAGCT
GCTGAGCCGCGCGCGCCCGCTTTCCAAGATGGCTACCC
CTTCGATGATGCCGAGTGCTTACATGCACATCTCGGGCC
AGGACGCCTCGGAGTACCTGAGCCCCGGGCTGGTGCAG
TTTGCCCGCGCCACCGAGACGTACTTCAGCCTGAATAACAAG
TTTAGAAACCCACGGTGGCGCCTACGCACGACGTGAC
CACAGACCGGTCCCAGCGTTTGACGCTGCGGTTTCATCCCTGT
GGACCGTGAGGATACTGCGTACTCGTACAAGGCGCGGT
TCACCCTAGCTGTGGGTGATAACCGTGTGCTGGACATGGCTT
CCACGTACTTTGACATCCGCGGGCGTGCTGGACAGGGGC
CCTACTTTTAAGCCCTACTCTGGCACTGCCTACAACGCCCTG
GCTCCCAAGGGTGCCCCAAATCCTTGCGAATGGGATGA
AGCTGCTACTGCTCTTGAAATAAACCTAGAAGAAGAGGACG
ATGACAACGAAGACGAAGTAGACGAGCAAGCTGAGCAGC
AAAAAACTCACGTATTTGGGCAGGCGCCTTATTCTGGTATAA

FIG.10K

Handwritten notes and signatures in the bottom right corner, including a vertical signature and some illegible text.



ATATTACAAAGGAGGGTATTCAAATAGGTGTCGAAGGT
CAAACACCTAAATATGCCGATAAAACATTTCAACCTGAACCT
CAAATAGGAGAATCTCAGTGGTACGAAACTGAAATTAA
TCATGCAGCTGGGAGAGTCCTTAAAAAGACTACCCCAATGAA
ACCATGTTACGGTTCATATGCAAAACCCACAAATGAAA
ATGGAGGGCAAGGCATTCTTGTAAGCAACAAAATGGAAAG
CTAGCCCGTCAAGTGGAATGCAATTTTTCTCAACTACT
GAGGCGACCGCAGGCAATGGTGATAACTTGACTCCTAAAGT
GGTATTGTACAGTGAAGATGTAGATATAGAAACCCGAGA
CACTCATATTTCTTACATGCCCACTATTAAGGAAGGTAACCTCA
CGAGAACTAATGGGCCAACAATCTATGCCCAACAGGC
CTAATTACATTGCTTTTTAGGGACAATTTTATTGGTCTAATGTA
TTACAACAGCACGGGTAAATATGGGTGTTCTGGCGGGC
CAAGCATCGCAGTTGAATGCTGTTGTAGATTTGCAAGACAGA
AACACAGAGCTTTCATACCAGCTTTTGCTTGATTCCAT
TGGTGATAGAACCAGGTACTTTTCTATGTGGAATCAGGCTGT
TGACAGCTATGATCCAGATGTTAGAATTATTGAAAATC
ATGGAAGTGAAGATGAAGTTCCTAAATTACTGCTTTCCACTGG
GAGGTGTATTAATACAGAGACTCTTACCAAGGTAAAA
CCTAAAACAGGTCAGGAAAATGGATGGGAAAAAGATGCTAC
AGAATTTTTCAGATAAAAAATGAAATAAGAGTTGGAAATAA
TTTTGCCATGGAAATCAATCTAAATGCCAACCTGTGGAGAAA
TTTCTGTACTCCAACATACGCGTGTATTTGCCCGACA
AGCTAAAGTACAGTCCTTCCAACGTAAAAATTTCTGATAACC
CAAACACCTACGACTACATGAACAAGCGAGTGGTGGCT
CCCGGGTTAGTGGACTGCTACATTAACCTTGGAGCACGCTG
GTCCCTTGACTATATGGACAACGTCAACCCATTTAACCA
CCACCGCAATGCTGGCCTGCGCTACCGCTCAATGTTGCTGG
GCAATGGTCGCTATGTGCCCTTCCACATCCAGGTGCCTC
AGAAGTTCTTTGCCATTAAAAACCTCCTTCTCCTGCCGGGCT
CATACACCTACGAGTGGAACCTTCAGGAAGGATGTTAAC
ATGGTTTCTGCAGAGCTCCCTAGGAAATGACCTAAGGGTTGA
CGGAGCCAGCATTAAGTTTGATAGCATTTGCCTTTACGC
CACCTTCTTCCCCATGGCCCAACAACACCGCCTCCACGCTTGA
GGCCATGCTTAGAAACGACACCAACGACCAGTCCTTTA
ACGACTATCTCTCGCCGCCAACATGCTCTACCCTATACCCG
CCAACGCTACCAACGTGCCCATATCCATCCCCTCCCGC
AACTGGGCGGCTTTCCGCGGCTGGGCCTTCACGCGCCTTAA
GACTAAGGAAACCCCATCACTGGGCTCGGGCTACGACCC
TTATTACACCTACTCTGGCTCTATACCCTACCTAGATGGAACC
TTTTACCTCAACCACACCTTTAAGAAGGTGGCCATTA
CCTTTGACTCTTCTGTCAGCTGGCCTGGCAATGACCGCCTGC
TTACCCCCAACGAGTTTGAAATTAAGCGCTCAGTTGAC
GGGGAGGGTTACAACGTTGCCAGTGTAACATGACCAAAGA
CTGGTTCCTGGTACAAATGCTAGCTAACTACAACATTGG
CTACCAGGGCTTCTATATCCCAGAGAGCTACAAGGACCGCAT

FIG.10L

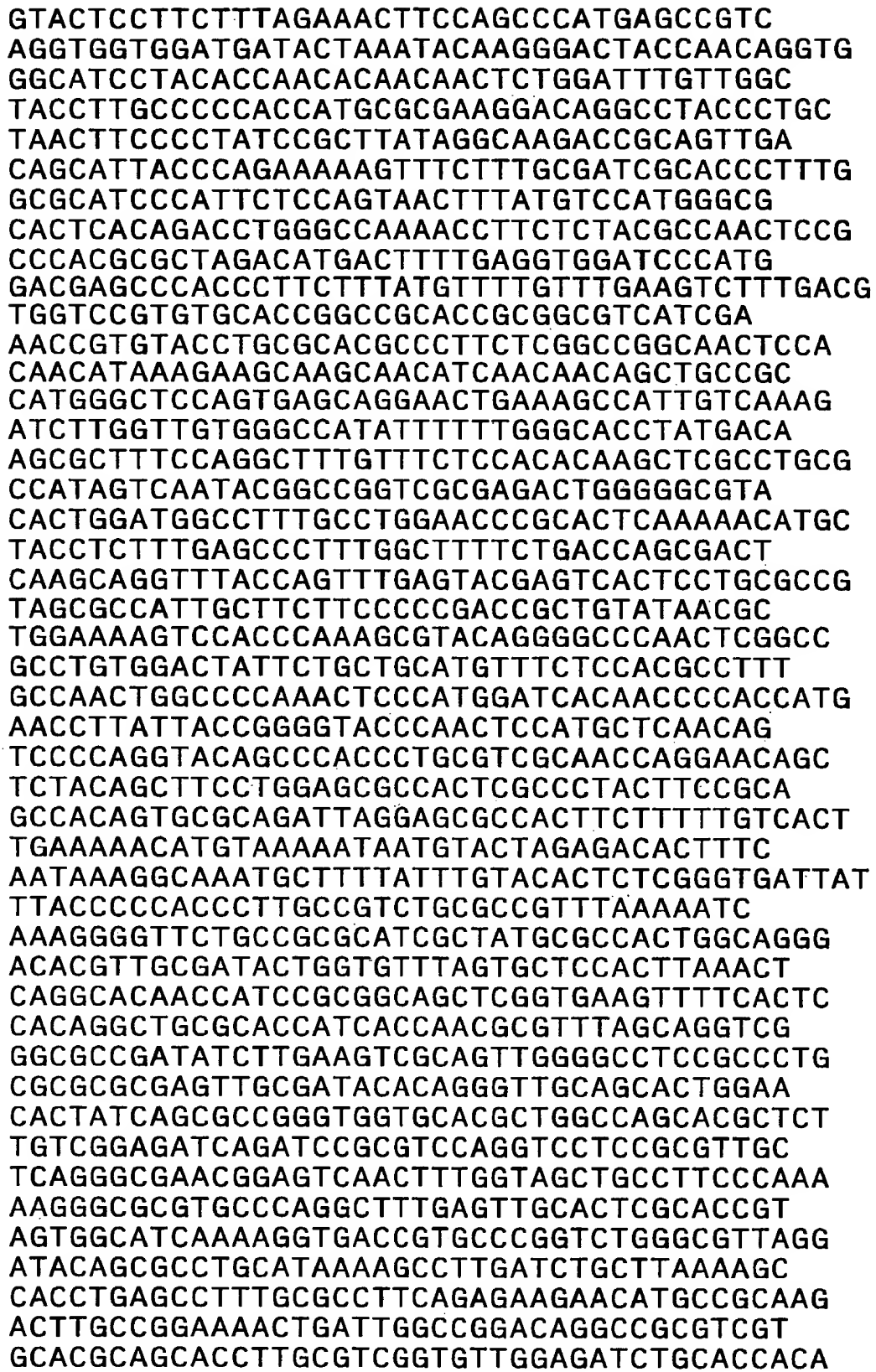


FIG.10M

[illegible]



TTTCGGCCCCACCGGTTCTTCACGATCTTGGCCTTGCTA
GACTGCTCCTTCAGCGCGCGCTGCCCGTTTTTCGCTCGTCACA
TCCATTTCAATCACGTGCTCCTTATTTATCATAATGCT
TCCGTGTAGACACTTAAGCTCGCCTTCGATCTCAGCGCAGCG
CTGCAGCCACAACGCGCAGCCCGTGGGCTCGTGATGCT
TGTAGGTCACCTCTGCAAACGACTGCAGGTACGCCTGCAGG
AATCGCCCCATCATCGTCACAAAGGTCTTGTTGCTGGTG
AAGGTCAGCTGCAACCCGCGGTGCTCCTCGTTCAGCCAGGT
CTTGCATACGGCCGCCAGAGCTTCCACTTGGTCAGGCAG
TAGTTTGAAGTTTCGCTTTAGATCGTTATCCACGTGGTACTTG
TCCATCAGCGCGCGCGCAGCCTCCATGCCCTTCTCCC
ACGCAGACACGATCGGCACACTCAGCGGGTTCATCACCGTA
ATTTCACTTTCCGCTTTCGCTGGGCTCTTCCTCTTCCTCT
TGCGTCCGCATACCACGCGCCACTGGGTGCTCTTCATTACGC
CGCCGCACTGTGCGCTTACCTCCTTTGCCATGCTTGAT
TAGCACCGGTGGGTTGCTGAAACCCACCATTTGTAGCGCCA
CATCTTCTCTTTCTTCCTCGCTGTCCACGATTACCTCTG
GTGATGGCGGGCGCTCGGGCTTGGGAGAAGGGCGCTTCTTT
TTCTTCTTGGGCGCAATGGCCAAATCCGCCGCCGAGGTC
GATGGCCGCGGGCTGGGTGTGCGCGGCACCAGCGCGTCTT
GTGATGAGTCTTCTCCTCGTCTCGGACTCGATACGCCGCCT
CATCCGCTTTTTTGGGGGCGCCCGGGGAGGCGGGCGGCGAC
GGGGACGGGGACGACACGTCCTCCATGGTTGGGGGACGTC
GCGCCGCACCGCGTCCGCGCTCGGGGGTGGTTTCGCGCTG
CTCCTCTTCCCGACTGGCCATTTCTTCTCCTATAGGCAG
AAAAAGATCATGGAGTCAGTCGAGAAGAAGGACAGCCTAAC
CGCCCCCTCTGAGTTCGCCACCACCGCCTCCACCGATGC
CGCCAACGCGCCTACCACCTTCCCCGTCGAGGCACCCCCGC
TTGAGGAGGAGGAAGTGATTATCGAGCAGGACCCAGGTT
TTGTAAAGCGAAGACGACGAGGACCGCTCAGTACCAACAGAG
GATAAAAAGCAAGACCAGGACAACGCAGAGGCAAACGAG
GAACAAGTCGGGCGGGGGGACGAAAGGCATGGCGACTACC
TAGATGTGGGAGACGACGTGCTGTTGAAGCATCTGCAGCG
CCAGTGCGCCATTATCTGCGACGCGTTGCAAGAGCGCAGCG
ATGCTGCCCCCTCGCCATAGCGGATGTCAGCCTTGCCCTACG
AACGCCACCTATTCTCACCGCGCGTACCCCCCAAACGCCAAG
AAACGGCACATGCGAGCCCAACCCGCGCCTCAACTTC
TACCCGTATTTGCCGTGCCAGCGGTGCTTGCCACCTATCAC
ATCTTTTTTCCAAAACCTGCAAGATACCCCTATCCTGCCG
TGCCAACCGCAGCCGAGAGACAAGCAGCTGGCCTTGCGG
CAGGGCGCTGTCATACCTGATATCGCCTCGCTCAACGAAG
TGCCAAAAATCTTTGAGGGTCTTGGACGCGACGAGAAGCGC
GCGGCAAACGCTCTGCAACAGGAAAACAGCGAAAATGAA
AGTCACTGGAGTGTTGGTGGAACTCGAGGGTGACAACGC
GCGCCTAGCCGTACTAAAACGCAGCATCGAGGTCACCCA
CTTTGCCTACCCGGCACTTAACCTACCCCCCAAGGTCATGAG

FIG.10N

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CACAGTCATGAGTGAGCTGATCGTGCGCCGTGCGCAGC
CCCTGGAGAGGGGATGCAAATTTGCAAGAACAAACAGAGGAG
GGCCTACCCGCGAGTTGGCGACGAGCAGCTAGCGCGCTGG
CTTCAAACGCGCGAGCCTGCCGACTTGGAGGAGCGACGACGCAA
ACTAATGATGGCCGCGAGTGCTCGTTACCGTGGAGCTTGA
GTGCTGCAGCGGTTCTTTGCTGACCCGGAGATGCAGCGCA
AGCTAGAGGAAACATTGCACTACACCTTTTCGACAGGGCT
ACGTACGCCAGGCCTGCAAGATCTCCAACGTGGAGCTCTGC
AACCTGGTCTCCTACCTTGGAAATTTTGCACGAAAACCGC
CTTGGGCAAAACGTGCTTCAATCCACGCTCAAGGGCGAGGC
GCGCCGCGACTACGTCCGCGACTGCGTTTACTTATTTCT
ATGCTACACCTGGCAGACGGCCATGGGCGTTTGGCAGT
GCTTGGAGGAGTGCAACCTTCAAGGAGCTGCAGAACTGC
TAAAGCAAACTTGAAGGACCTATGGACGGCCTTCAACGAG
CGCTCCGTGGCCGCGCACCTGGCGGACATCATTTTCCCC
GAACGCCTGCTTAAAACCTGCAACAGGGTCTGCCAGACTTC
ACCAGTCAAAGCATGTTGCAGAACTTTAGGAACTTTAT
CCTAGAGCGCTCAGGAATCTTGCCCGCCACCTGCTGTGCACT
TCCTAGCGACTTTGTGCCCATTAAGTACCGCGAATGCC
CTCCGCCGCTTTGGGGCCACTGCTACCTTCTGCAGCTAGCCA
ACTACCTTGCCTACCACTCTGACATAATGGAAGACGTG
AGCGGTGACGGTCTACTGGAGTGTCACTGTCGCTGCAACCT
ATGVAVVVGVAVVGVTVVVTGGTTTGVAATTVGVAAGT
GCTTAACGAAAGTCAAATTATCGGTACCTTTGAGCTGCAGGG
TCCCTCGCCTGACGAAAAGTCCGCGGCTCCGGGGTTCA
AACTCACTCCGGGGCTGTGGACGTGCGCTTACCTTCGCAAAT
TTGTACCTGAGGACTACCACGCCACGAGATTAGGTTC
TACGAAGACCAATCCCGCCCGCCAAATGCGGAGCTTACCGC
CTGCGTCATTACCCAGGGCCACATTCTTGGCCAATTGCA
AGCCATCAACAAAGCCCGCCAAGAGTTTCTGCTACGAAAGG
GACGGGGGGTTTACTTGGACCCCGAGTCCGGCGAGGAGC
TCAACCCAATCCCCCGCCGCGCAGCCCTATCAGCAGCAG
CCGCGGGGCCCTTGCTTCCCAGGATGGCACCCAAAAAGAA
GCTGCAGCTGCCGCGCCACCCACGGACGAGGAGGAATACT
GGGACAGTCAGGCAGAGGAGGTTTTTGGACGAGGAGGAGG
AGGACATGATGGAAGACTGGGAGAGCCTAGACGAGGAAGC
TTCCGAGGTGGAAGAGGTGTCAGACGAAACACCGTCACCC
TCGGTCGCATTCCCCTCGCCGGCGCCCGAGAAATCGGCAAC
CGGTTCCAGCATGGCTACAACCTCCGCTCCTCAGGCGCC
GCCGGCACTGCCCGTTTCGCCGACCCAACCGTAGATGGGACA
CCACTGGAACCAGGGCCGGTAAGTCCAAGCAGCCGCCGC
CGTTAGCCCAAGAGCAACAACAGCGCCAAGCTACCGCTCA
TGGCGCGGGCACAAGAACGCCATAGTTGCTTGCCTTGCAA
GACTGTGGGGGGCAACATCTCCTTCGCCCGCGCTTTCTTCTC
TACCATCACGGCGTGCCCTTCCCCCGTAACATCCTGCA
TTACTACCGTCATCTCTACAGCCATACTGCACCGGGCGGCAG

FIG.100



CGGCAGCGGCAGCAACAGCAGCGGCCACACAGAAGCAA
AGGCGACCGGATAGCAAGACTCTGACAAAGCCCAAGAAATC
CACAGCGGCGGCAGCAGCAGGAGGAGGAGCGCTGCGTCT
GGCGCCCAACGAACCCGTATCGACCCGCGAGCTTAGAAACA
GGATTTTTTCCCACTCTGTATGCTATATTTCAACAGAGCA
GGGGCCAAGAACAAGAGCTGAAAATAAAAAACAGGTCTCTG
CGATCCCTCACCCGCAGCTGCCTGTATCACAAAAGCGAA
GATCAGCTTCGGCGCACGCTGGAAGACGCGGAGGCTCTCTT
CAGTAAATACTGCGCGCTGACTCTTAAGGACTAGTTTCG
CGCCCTTTCTCAAATTTAAGCGCGAAAACCTACGTCATCTCCA
GCGGCCACACCCGGCGGCCAGCACCTGTCGTCAGCGCCA
TTATGAGCAAGGAAATTCCCACGCCCTACATGTGGAGTTACC
AGCCACAAATGGGACTTGCGGCTGGAGCTGCCCAAGAC
TACTCAACCCGAATAAACTACATGAGCGCGGGACCCACAT
GATATCCCGGGTCAACGGAATCCGCGCCCAACGAAACCG
AATTCTCTTGGAACAGGCGGCTATTACCACCACACCTCGTAA
TAACCTTAATCCCGGTAGTTGGCCCGCTGCCCTGGTGT
ACCAGGAAAGTCCCGCTCCCACCACTGTGGTACTTCCCAGA
GACGCCCAGGCCGAAGTTCAGATGACTAACTCAGGGGCG
CAGCTTGCGGGCGGCTTTTCGTCACAGGGTGCGGTGCGCCGG
GCAGGGTATAACTCACCTGACAATCAGAGGGCGAGGTAT
TCAGCTCAACGACGAGTCGGTGAGCTCCTCGCTTGGTCTCC
GTCCGGACGGGACATTTTCAGATCGGCGGGCGCCGGCCGTC
GTTCAATTCACGCCTCGTCAGGCAATCCTAACTCTGCAGACCT
CGTCCTCTGAGCCGCGCTCTGGAGGCATTGGAACCTCTG
CATTTATTGAGGAGTTTGTGCATCGGTCTACTTTAAACCCCT
TCTCGGGACCTCCCGGCCACTATCCGGATCAATTTAT
TCCTAACTTTGACGCGGTAAAGGACTCGGCGGACGGCTACG
ACTGAATGTTAAGTGGAGAGGCAGAGCAACTGCGCCTGA
AACACCTGGTCCACTGTCGCCGCCACAAGTGCTTTGCCCGC
GACTCCGGTGAGTTTTTGCTACTTTGAATTGCCCGAGGAT
CATATCGAGGGCCCGGCGCACGGCGTCCGGCTTACCGCCCA
GGGAGAGCTTGCCCGTAGCCTGATTCGGGAGTTTACCCA
GCGCCCCCTGCTAGTTGAGCGGGACAGGGGACCCTGTGTTT
TCACTGTGATTTGCAACTGTCCTAACCTTGGATTACATC
AAGATCTTTGTTGCCATCTCTGTGCTGAGTATAATAAATACAG
AAATTAAAATATACTGGGGCTCCTATCGCCATCCTGT
AAACGCCACCGTCTTCACCCGCCCAAGCAAACCAAGGCGAA
CCTTACCTGGTACTTTTAAACATCTCTCCCTCTGTGATTT
ACAACAGTTTCAACCCAGACGGAGTGAGTCTACGAGAGAAC
CTCTCCGAGCTCAGCTACTCCATCAGAAAAAACACCACC
CTCTCCGAGCTCAGCTACTCCATCAGAAAAAACACCACC
CTCCTTACCTGCCGGGAACGTACGAGTGCGTCAACGGCCGC
TGCACCACACCTACCGCCTGACCGTAAACCAGACTTTTT
CCGGACAGACCTCAATAACTCTGTTTACCAGAACAGGAGGT
GAGCTTAGAAAAACCTTAGGGTATTAGGCCAAAGGCGCA

FIG.10P

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ACTTTTCCATTTTATGAAATGTGCTACATTACCATGTACATGA
GCAAACAGTATAAGTTGTGGCCCCCACAAAATTGTGT
GGAAAACACTGGCACTTTCTGCTGCACTGCTATGCTAATTAC
AGTGCTCGCTTTGGTCTGTACCCTACTCTATATTAAAT
ACAAAAGCAGGACGCAGCTTTATTGAGGAAAAGAAAATGCCTT
AATTTACTAAGTTACAAAGCTAATGTCACCACTAACTG
CTTTACTCGCTGCTTGCAAAACAAATTCAAAAAGTTAGCATT
TAATTAGAATAGGATTTAAACCCCCCGGTCATTTCT
GCTCAATACCATTCCTTGAACAATTGACTCTATGTGGGATA
TGCTCCAGCGCTACAACCTTGAAGTCAGGCTTCCTGGA
TGTCAGCATCTGACTTTGGCCAGCACCTGTCCCGCGGATTTG
TTCCAGTCCAACCTACAGCGACCCACCCTAACAGAGATG
ACCAACACAACCAACGCGGCCGCGCTACCGGACTTACATC
TACCACAAATACACCCCAAGTTTCTGCCCTTTGTCAATAA
CTGGGATAACTTGGGCATGTGGTGGTTCTCCATAGCGCTTAT
GTTTGTATGCCTTATTATTATGTGGCTCATCTGCTGCC
TAAAGCGCAAACGCGCCCGACCACCCATCTATCGTCCCATCA
TTGTGCTACACCCAAACAATGATGGAATCCATAGATTG
GACGGACTGAAACACATGTTCTTTTCTCTTACAGTATGATTAA
ATGAGACATGATTCCTCGAGTTTTTATATTACTGACC
CTTGTTGCGCTTTTTTTGTGCGTGCTCCACATTGGCTGCGGTTT
CTCACATCGAAGTAGACTGCATTCCAGCCTTCACAGT
CTATTTGCTTTTACGGATTTGTACACCCTCACGCTCATCTGCAGC
CTCATCACTGTGGTCATCGCCTTTATCCAGTGCATTG
ACTGGGTCTGTGTGCGCTTTGCATATCTCAGACACCATCCCC
AGTACAGGGACAGGACTATAGCTGAGCTTCTTAGCCCT
GGACGGAATTATTACAGAGCAGCGCCTGCTAGAAAGACGCA
GGGCAGCGGCCGAGCAACAGCGCATGAATCAAGAGCTCC

TCAGAAATTGGTGGTCATGGTGGG
CATAACTCAGCACTCGGTAGAAACCGAAGGCTGCATTCACTC
ACCTTGTC AAGGACCTGAGGATCTCTGCACCCTTATTA

FIG.10Q

1000



AGACCCTGTGCGGTCTCAAAGATCTTATTCCCTTTAACTAATA
AAAAAAAAATAATAAAGCATCACTTACTTAAAATCAGT
TAGCAAATTTCTGTCCAGTTTATTTCAGCAGCACCTCCTTGCCC
TCCTCCCAGCTCTGGTATTGCAGCTTCCTCCTGGCTG
CAAACCTTTCTCCACAATCTAAATGGAATGTCAGTTTCCTCCTG
TTCCTGTCCATCCGCACCCACTATCTTCATGTTGTTG
CAGATGAAGCGCGCAAGACCGTCTGAAGATACCTTCAACCC
CGTGTATCCATATGACACGGAAACCGGTCCTCCAACCTGT
GCCTTTTCTTACTCCTCCCTTTGTATCCCCCAATGGGTTTCAA
GAGAGTCCCCCTGGGGTACTCTCTTTGCGCCTATCCG
AACCTCTAGTTACCTCCAATGGCATGCTTGCGCTCAAAATGG
GCAACGGCCTCTCTCTGGACGAGGCCGGCAACCTTACC
TCCCAAAATGTAACCACTGTGAGCCCCACCTGTGAAAAAAACC
AAGTCAAACATAAACCTGGAAATATCTGCACCCCTCAC
AGTTACCTCAGAAGCCCTAACTGTGGCTGCCGCCGCACCTCT
AATGGTCGCGGGCAACACACTCACCATGCAATCACAGG
CCCCGCTAACCGTGCACGACTCCAACTTAGCATTGCCACCC
AAGGACCCCTCACAGTGTCAGAAGGAAAGCTAGCCCTG
CAAACATCAGGCCCCCTCACCACCACCGATAGCAGTACCCTT
ACTATCACTGCCTCACCCCTCTAACTACTGCCACTGG
TAGCTTGGGCATTGACTTGAAAGAGCCCATTTATACACAAAA
TGGAAAACTAGGACTAAAGTACGGGGCTCCTTTGCATG
TAACAGACGACCTAAACACTTTGACCGTAGCAACTGGTCCAG
GTGTGACTATTAATAATACTTCCTTGCAAACATAAGTT
ACTGGAGCCTTGGGTTTTTGATTCACAAGGCAATATGCAACTT
AATGTAGCAGGAGGACTAAGGATTGATTCTCAAAACAG
ACGCCTTATACTTGATGTTAGTTATCCGTTTGATGCTCAAAAC
CAACTAAATCTAAGACTAGGACAGGGCCCTCTTTTTA
TAAACTCAGCCCACAACCTTGGATATTAATACTACAACAAAGGCC
TTTACTTGTTTACAGCTTCAAACAATTCCAAAAAGCTT
GAGGTTAACCTAAGCACTGCCAAGGGGTTGATGTTTGACGC
TACAGCCATAGCCATTAATGCAGGAGATGGGCTTGAATT
TGGTTACCTAATGCACCAAACACAAATCCCCTCAAAACAAA
AATTGGCCATGGCCTAGAATTTGATTCAAACAAGGCTA
TGGTTCCTAAACTAGGAACTGGCCTTAGTTTTGACAGCACAG
GTGCCATTACAGTAGGAAACAAAAATAATGATAAGCTA
ACTTTGTGGACCACACCAGCTCCATCTCCTAACTGTAGACTA
AATGCAGAGAAAGATGCTAAACTCACTTTGGTCTTAAC
AAAATGTGGCAGTCAAATACTTGCTACAGTTTCAGTTTTGGC
TGTTAAAGGCAGTTTGGCTCCAATATCTGGAACAGTTC
AAAGTGCTCATCTTATTATAAGATTTGACGAAAATGGAGTGC
TACTAAACAATTCCTTCCTGGACCCAGAATCTTGGAAC
TTTAGAAATGGAGATCTTACTGAAGGCACAGCCTATACAAAC
GCTGTTGGATTTATGCCTAACCTATCAGCTTATCCAAA
ATCTCACGGTAAAACTGCCAAAAGTAACATTGTCAGTCAAGT
TACTTAAACGGGAGACAAAACCTAAACCTGTAACACTAA

FIG.10R

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CCATTACACTAAACGGGTACACAGGAAACAGGAGACACAAC
CCAAGTGCATACTCTATGTCATTTTCATGGGACTGGTCT
GGCCACAACCTACATTAATGAAATATTTGCCACATCCTCTTACA
CTTTTTTCATACATTGCCCAAGAATAAAGAATCGTTTG
TGTTATGTTTCAACGTGTTTATTTTTCAATTGCAGAAAATTTCA
AGTCATTTTTTCATTAGTAGTATAGCCCCACCACCA
CATAGCTTATACAGATCACCGTACCTTAATCAAACCTCACAGA
ACCCTAGTATTCAACCTGCCACCTCCCTCCCAACACAC
AGAGTACACAGTCCTTTCTCCCCGGCTGGCCTTAAAAAGCAT
CATATCATGGGTAAACAGACATATTCTTAGGTGTTATAT
TCCACACGGTTTTCTGTGCGAGCCAAACGCTCATCAGTGATAT
TAATAAACTCCCCGGGCAGCTCACTTAAGTTCATGTGCG
CTGTCCAGCTGCTGAGCCACAGGCTGCTGTCCAACCTTGCGG
TTGCTTAACGGGCGGCGAAGGAGAAGTCCACTCCTACAT
GGGGGTAGAGTCATAATCGTGCATCAGGATAGGGCGGTGGT
GCTGCAGCAGCGGCGAATAAACTGCTGCCGCCGCCGCT
CCGTCCTGCAGGAATACAACATGGCAGTGGTCTCCTCAGCG
ATGATTCGCACCGCCCGCAGCATAAGGCGCCTTGTCCTC
CGGGCACAGCAGCGCACCCCTGATCTCACTTAAATCAGCACA
GTAACCTGCAGCACAGCACCAATATTGTTCAAAATCCC
ACAGTGCAAGGCGCTGTATCCAAAGCTCATGGCGGGGACCA
CAGAACCCACGTGGCCATCATACCACAAGCGCAGGTAGA
TTAAGTGGCGACCCCTCATAAACACGCTGGACATAAACATTA
CCTCTTTTTGGCATGTTGTAATTCACCACCTCCCGGTAC
CATATAAACCTCTGATTAAACATGGCGCCATCCACCACCATC
CTAAACCAGCTGGCCAAAACCTGCCCGCCGGCTATACA
CTGCAGGGGAACCGGGACTGGAACAATGACAGTGGAGAGCC
CAGGACTCGTAACCATGGATCATCATGCTCGTCATGATAT
CAATGTTGGCACAACACAGGCACACGTGCATACACTTCCTCA
GGATTACAAGCTCCTCCCGCGTTAGAACCATATCCCAG
GGAACAACCCATTCTGAATCAGCGTAAATCCCACACTGCAG
GGAAGACCTCGCACGTAACCTCACGTTGTGCATTGTCAA
AGTGTTACATTGCGGCGAGCAGCGGATGATCCTCCAGTATGG
TAGCGCGGGTTTTCTGTCTCAAAGGAGGTAGACGATCCC
TACTGTACGGAGTGCGCCGAGACAACCGAGATCGTGTTGGT
CGTAGTGTTCATGCCAAATGGAACGCCGGACGTAGTCATA
TTTCTGAAGCAAAACCAGGTGCGGGCGTGACAAACAGATC
TGCGTCTCCGGTCTCGCCGCTTAGATCGCTCTGTCTAGT
AGTTGTAGTATATCCACTCTCTCAAAGCATCCAGGCGCCCCC
TGGCTTCGGGTTCTATGTAACTCCTTCATGCGCCGCT
GCCCTGATAACATCCACCACCGCAGAATAAGCCACACCCAG
CCAACCTACACATTCGTTCTGCGAGTCACACACGGGAGG
AGCGGGAAGAGCTGGAAGAACCATGTTTTTTTTTTTATTCCA
AAAGATTATCCAAAACCTCAAATGAAGATCTATTAAG
TGAACGCGCTCCCCTCCGGTGGCGTGGTCAAACCTCTACAGC
CAAAGAACAGATAATGGCATTGTGTAAGATGTTGCACAAT

FIG.10S

SECRET

SECRET



GGCTTCCAAAAGGCAAACGGCCCTCACGTCCAAGTGGACGT
AAAGGCTAAACCCTTCAGGGTGAATCTCCTCTATAACA
TTCCAGCACCTTCAACCATGCCCAAATAATTCTCATCTCGCCA
CCTTCTCAATATATCTCTAAGCAAATCCCGAATATTA
AGTCCGGCCATTGTAAAAATCTGCTCCAGAGCGCCCTCCACC
TTCAGCCTCAAGCAGCGAATCATGATTGCAAAAATTCA
GGTTCCTCACAGACCTGTATAAGATTCAAAAGCGGAACATTA
ACAAAAATACCGCGATCCCGTAGGTCCCTTCGCAGGGC
CAGCTGAACATAATCGTGCAGGTCTGCACGGACCAGCGCGG
CCACTTCCCCGCCAGGAACCTTGACAAAAGAACCCACAC
TGATTATGACACGCATACTCGGAGCTATGCTAACCAGCGTAG
CCCCGATGTAAGCTTTTGTTCATGGGCGGCGATATAAA
ATGCAAGGTGCTGCTCAAAAAATCAGGCAAAGCCTCGCGCA
AAAAAGAAAGCACATCGTAGTCATGCTCATGCAGATAAA
GGCAGGTAAGCTCCGGAACCAACACAGCCCCCGACACCATT
TTTCTCTCAAACATGTCTGCGGGTTTCTGCATAAACACA
AAATAAAATAACAAAAAAACATTTAAACATTAGAAGCCTGTCT
TACAACAGGAAAAACAACCCTTATAAGCATAAGACGG
ACTACGGCCATGCCGGCGTGACCGTAAAAAACTGGTCACC
GTGATTAAAAAGCACCAACGACAGCTCCTCGGTCATGTC
CGGAGTCATAATGTAAGACTCGGTAAACACATCAGGTTGATT
CATCGGTCAGTGCTAAAAAGCGACCGAAATAGCCCCGGG
GGAATACATACCCGCAGGCGTAGAGACAACATTACAGCCCC
CATAGGAGGTATAACAAAATTAATAGGAGAGAAAAACAC
ATAAACACCTGAAAAACCCTCCTGCCTAGGCAAAATAGCACC
CTCCCGCTCCAGAACAACATACAGCGCTTCACAGCGGC
AGCCTAACAGTCAGCCTTACCAGTAAAAAAGAAAACCTATTA
AAAAAACACCACTCGACACGGCACCAGCTCAATCAGTC
ACAGTGTA AAAAAGGGCCAAGTGCAGAGCGAGTATATATAG
GACTAAAAAATGACGTAACGGTTAAAGTCCACAAAAAAC
ACCCAGAAAACCGCACGCGAACCTACGCCCAGAAACGAAAG
CCAAAAAACCCACAACCTTCCTCAAATCGTCACTTCCGTT
TTCCACGTTACGTAACCTTCCCATTTTAAAGAAAACCTACAATTC
CCAACACATACAAGTTACTCCGCCCTAAAACCTACGT
CACCCGCCCCGTTCCACGCCCCGCGCCACGTCACAAACTC
CACCCCTCATTATCATATTGGCTTCAATCCAAAATAAG
GTATAT

FIG.10T

FIG. 10T